

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 28 and 29, and AMEND claims 18, 19, 21, 26, 27 and 33-35 in accordance with the following:

Claims 1-17 (cancelled)

18. (currently amended) A method for connection setup for mobile stations of a radio communication system having at least one base station, comprising:

recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

in the mobile station that requests a connection setup, measuring a reception power of a signal sent from the base station in a downstream direction;

sending, from the base station to the mobile station, information about base station transmission power in the downstream direction; and

in the mobile station, setting a mobile station transmission power, dependent on the measured reception power and the information about the base station transmission power, for sending an access radio block to the base station, ~~wherein codes are used to separate information of different connections between the base station and mobile stations;~~

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

wherein the signal transmitted in the downstream direction is a pilot signal.

19. (currently amended) The method according to claim 18, wherein the radio communication system is configured as a TDMA/CDMA radio communication system, a plurality of connections between the mobile frequency channels information of different connections can be distinguished from one another according to a connection-individual code, whereby

information is simultaneously transmitted between stations and the base station in time slots based on the information of the codes used to separate information of different connections.

20. (previously presented) The method according to claim 19, wherein the information of different connections are spread with the individual codes.

21. (currently amended) The method according to claim 18, wherein the mobile station sets the mobile station transmission power all the higher the lower the measured reception power is.

Claims 22 and 23 (cancelled)

24. (previously presented) The method according to claim 18, wherein another signal transmitted in the downstream direction is a training sequence signal.

25. (previously presented) The method according to claim 18 wherein another signal transmitted in the downstream direction is a data signal.

26. (currently amended) The method according to claim 18, wherein the mobile station estimates a radio field attenuation in the downstream direction on the basis of the measured reception power and sets the mobile station transmission power such that the radio field attenuation is partially compensated.

27. (currently amended) The method according to claim 26, wherein the mobile station sets the mobile station transmission power such that the radio field attenuation is completely compensated.

Claims 28 and 29 (cancelled)

30. (previously presented) The method according to claim 18, wherein a broadband frequency range is divided into sub-ranges having a narrower bandwidth within a frequency channel for the random access, the mobile station that requests the connection setup selecting a sub-range within said frequency channel, and the mobile station sending the access radio block to the base station in this sub-range.

31. (previously presented) The method according to claim 18, wherein the access radio block is not spread.

32. (previously presented) The method according to claim 18, wherein the access radio block is spread with an individual code.

33. (currently amended) A mobile station to which a connection setup is to be provided in a radio communication system having at least one base station, and wherein frequency channels are recurrently offered for a random access in an upstream direction for the mobile station, comprising:

a measuring unit for measuring a reception power of a signal sent from the base station in a downstream direction when the mobile station requests a connection setup;

a transmission power setting unit which, dependent on measured reception power, sends an access radio block to the base station;

a receiving unit receiving information about base station transmission power used by the base station in the downstream direction; and

a control panel for triggering the random access,

wherein said measuring unit comprises a signal processing unit for measuring the reception power of the signal sent in the downstream direction from the base station and for generating the access radio block,

wherein said transmission power setting unit comprises a control unit for setting the transmission power for the transmission of the access radio block to the base station dependent on the measured reception power and the information about the base station transmission power, ~~wherein codes are used to separate information of different connections between the base station and mobile stations,~~

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

wherein the signal transmitted in the downstream direction is a pilot signal.

34. (currently amended) A base station in a radio communication system wherein a connection setup occurs from mobile stations, and wherein the mobile station that requests a connection setup measures a reception power of a signal sent from the base station in a downstream direction, and wherein the mobile station sets a transmission power dependent on the measured reception power for sending an access radio block to the base station, comprising:

a unit for recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

a signal processing unit for generating the signal to be transmitted in the downstream direction; and

a control unit for setting a transmission power for sending the signal to the mobile station that requests the connection setup, ~~wherein codes are used to separate information of different connections between the base station and mobile stations,~~

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power, and

wherein the signal transmitted in the downstream direction is a pilot signal, and wherein information about base station transmission power used by the base station in the downstream direction is sent from the base station to the mobile station and is employed by the mobile station for setting the transmission power.

35. (currently amended) A mobile station for transmission of data, block-by-block, to a base station on frequency channels, which are recurrently offered for random access, comprising:

a measuring unit for measuring a reception power of a broadcast signal transmitted by the base station, the broadcast signal being selected from the group consisting of a training sequence signal, a data sequence signal, a pilot signal and a control signal;

a transmitter to send an access radio block to the base station without a frequency channel having been previously allocated to the mobile station, the access block requesting a connection setup with the base station, the transmitter transmitting the access block to the base station on a random access channel;

a receiving unit to receive information about base station transmission power used by the base station in the downstream direction; and

a power limiter to limit a transmission power of the access radio block before transmission of the access radio block, based on the information about the base station transmission power and the reception power of the broadcast signal transmitted by the base station, such that the transmission power is reduced for a larger reception power and the transmission power is increased for a lower reception power, wherein codes are used to separate information of different connections between the base station and mobile stations,

wherein if the access radio block, sent to the base station, has not been successfully detected by the base station, a new access radio block is sent by the mobile station with increased power.